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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,188	10/12/2001	Erik M. Geidl	2870	1419

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EXAMINER	
ZHOU, TING	
ART UNIT	**PAPER NUMBER**
2173	4

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/976,188	GEIDL, ERIK M.
	Examiner	Art Unit
	Ting Zhou	2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-33 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-33 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 12 October 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

The abstract is objected to as being too long in length. It is suggested that the applicant revise the abstract to fit within the 50 to 150 word limit.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 6, 9-12, 14-15, 17-20, 23 and 25-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Schlimmer et al. in the article entitled "Quantitative Results Comparing Three Intelligent Interfaces for Information Capture: A Case Study Adding Name Information into an Electronic Personal Organizer", published in the December 1996 issue of the *Journal of Artificial Intelligence Research 5*.

Referring to claims 1 and 18, Schlimmer et al. teach a method and system comprising user input interface code (user interface to convert writing to Unicode text), a field typing engine evaluating a program field that has focus against information indicative of whether the field is configured to receive text input (deciding if fields such as "Last", "Title", etc. is configured to receive user input, i.e. whether the user has taped on the field indicating a desire to enter information), and if the field is configured to receive text input (if the user taps on a field), providing a visible user input interface at a displayed location relative to the field (the field expands to allow users to write information), receiving handwritten data at the input interface, providing the handwritten data to a recognition engine, and returning a recognition result to the program (Section 2 on page 330 and 331). This is further shown and explained in Figure 1.

Referring to claims 2 and 19, Schlimmer et al. teach the visible user input interface being semi-transparent (dotted-line box representing the expanded field allowing users to write information) (Figure 1).

Referring to claims 6 and 26, Schlimmer et al. teach providing the handwritten data to a recognition engine in response to detection of a submit button associated with the visible user interface (for example, submitting the name written as a new name by selecting the "New" button) (page 331 and further shown in Figure 1).

Referring to claims 9 and 20, Schlimmer et al. teach evaluating at least one window attribute corresponding to the field against retrieved information (for example, opening the menu of recently used city names if the user taps on the "City" field) (page 332 and Figure 2).

Referring to claim 10, Schlimmer et al. teach accessing window class information (for example, opening the menu of recently used city names if the user taps on the "City" field) (page 332 and Figure 2).

Referring to claim 11, Schlimmer et al. teach accessing a database to obtain the information indicative of whether the field is configured to receive text input (obtaining information such as whether the user has tapped a field, such an the "First" field in Figure 1, which indicates that the field is ready to receive text input) (page 331 and Figure 1).

Referring to claim 12, Schlimmer et al. teach adjusting the appearance of the visible input window (visible input fields such as the "First" field and "Company" fields can be adjusted, such as erasing the input areas by selected the "x" button at the bottom right corner of the input box), as shown in Figures 1 and 3.

Referring to claim 14, Schlimmer et al. teach erasing the visible input window (visible input fields such as the "First" field and "Company" fields can be adjusted, such as erasing the fields by selected the "x" button at the bottom right corner of the input box), as shown in Figures 1 and 3.

Referring to claim 15, Schlimmer et al. teach the visible input window being erased in response to receiving a close request (visible input fields such as the "First" field and "Company" fields can be adjusted, such as erasing the fields by selected the close request represented by the "x" button at the bottom right corner of the input box), as shown in Figures 1 and 3.

Referring to claim 17, Schlimmer et al. teach the visible input window being erased in response to a gesture being detected (such as selecting the close request represented by the "x" button at the bottom right corner of the input box), as shown in Figures 1 and 3.

Referring to claim 23, Schlimmer et al. teach the entered data comprising handwritten data (page 330), and further comprising a rulebase that determines an appearance of the visible input area including a displayed size thereof (for example, changing the size and appearance of the input area by closing the input area in response to selection of the "x" button at the bottom right corner of the input box) (Figures 1 and 3).

Referring to claim 25, Schlimmer et al. teach the visible input area has at least one button associated therewith for receiving a command (for example, selecting the "New" button for performing the command of inputting a new name) (page 331 and further shown in Figure 1).

Referring to claim 27, Schlimmer et al. teach the user input interface code provides the recognition result to the program in a message queue associated with the program (for example, the "City" field in the Names++ application has a message queue of recently used and recognized city names) (page 332 and Figure 2).

Referring to claim 28, Schlimmer et al. teach the drawing of the visible input area by positioning the visible input area relative to the field based on the information received from the field-typing engine (expanding the input area based on the field the user taps) (page 331 and Figure 1).

Referring to claim 29, Schlimmer et al. teach sizing the visible input area based on the information received from the field-typing engine (expanding the input area based on the field the user taps) (page 331 and Figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 3-5, 7-8, 16, 21-22 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlimmer et al. in the article entitled "Quantitative Results Comparing Three Intelligent Interfaces for Information Capture: A Case Study Adding Name Information into an Electronic Personal Organizer", published in the December 1996 issue of the *Journal of Artificial Intelligence Research 5*, as applied to claims 1 and 18 above, and Frink et al. U.S. Patent 5,956,423.

Referring to claim 3, Schlimmer et al. teach all of the limitations as applied to claim 1 above. However, Schlimmer et al. fail to explicitly teach the handwritten data received at the input interface being evaluated to determine whether the handwritten data corresponds to a gesture. Frink et al. teach an interface for inputting and recognizing handwritten data (Frink et al.: column 2, lines 37-65) similar to that of Schlimmer et al. In addition, Frink et al. further teach evaluating the handwritten data received at the input interface to determine whether the data corresponds to a gesture (Frink et al.: column 8, lines 29-49 and column 10, lines 29-33). It would have been obvious to one of ordinary skill in the art, having the teachings of Schlimmer et al. and Frink et al. before him at the time the invention was made, to modify the handwriting

input interface of Schlimmer et al. to include evaluation of the input for recognition of gestures, as taught by Frink et al. One would have been motivated to make such a combination in order to allow users to easily edit the documents, reducing the confusion of mixing up editing commands and data input by the user.

Referring to claims 4 and 21, Schlimmer et al. teach all of the limitations as applied to claims 1 and 18 above. However, Schlimmer et al. fail to explicitly teach determining when the handwritten data corresponds to a gesture and providing at least one pen event corresponding to the gesture to the program. Frink et al. teach an interface for inputting and recognizing handwritten data (Frink et al.: column 2, lines 37-65) similar to that of Schlimmer et al. In addition, Frink et al. further teach determining when the handwritten data corresponds to a gesture and providing at least one pen event corresponding to the gesture to the program (Frink et al.: column 2, lines 64-67, column 3, lines 1-4, column 8, lines 29-49, column 10, lines 63-67 and column 11, lines 1-4). It would have been obvious to one of ordinary skill in the art, having the teachings of Schlimmer et al. and Frink et al. before him at the time the invention was made, to modify the handwriting input interface of Schlimmer et al. to include evaluation of the input for recognition of gestures, as taught by Frink et al. One would have been motivated to make such a combination in order to allow users to easily edit the documents, reducing the confusion of mixing up editing commands and data input by the user.

Referring to claims 5 and 22, Schlimmer et al. teach all of the limitations as applied to claims 1 and 18 above. Specifically, Schlimmer et al. teach a semi-transparent user interface (dotted-line box representing the expanded field allowing users to write information) (Schlimmer et al.: Figure 1). However, Schlimmer et al. fail to explicitly teach the gesture comprising user

input directed to an area of the program that is visible through the user interface. Frink et al. teach an interface for inputting and recognizing handwritten data (Frink et al.: column 2, lines 37-65) similar to that of Schlimmer et al. In addition, Frink et al. further teach users inputting gestures directed to an area of the program that is visible through the interface (Frink et al.: column 2, lines 64-67 and column 3, lines 52-64 and column). It would have been obvious to one of ordinary skill in the art, having the teachings of Schlimmer et al. and Frink et al. before him at the time the invention was made, to modify the handwriting input interface of Schlimmer et al. to include evaluation of the input for recognition of gestures, as taught by Frink et al. One would have been motivated to make such a combination in order to allow users to easily edit the documents, reducing the confusion of mixing up editing commands and data input by the user.

Referring to claim 7, Schlimmer et al. teach all of the limitations as applied to claim 1 above. Specifically, Schlimmer et al. teach providing handwritten data to a recognition engine (Schlimmer et al.: Section 2 on page 330 and 331 and further shown in Figure 1). However, Schlimmer et al. fail to explicitly teach providing the handwritten data to the recognition engine in response to a time being achieved. Frink et al. teach an interface for inputting and recognizing handwritten data (Frink et al.: column 2, lines 37-65) similar to that of Schlimmer et al. In addition, Frink et al. further teach providing handwritten data to the recognition engine in response to a time being achieved (Frink et al.: column 2, lines 53-63). It would have been obvious to one of ordinary skill in the art, having the teachings of Schlimmer et al. and Frink et al. before him at the time the invention was made, to modify the handwriting input interface and recognition engine of Schlimmer et al. to include the recognition of handwritten data in response to a time being achieved, as taught by Frink et al. One would have been motivated to make such

a combination in order to allow users to perform functions such as note taking faster and more efficiently; recognizing characters after a certain time has elapsed, representing the user has completed taking notes, is faster and more efficient than translating the written data character by character while the user is taking notes.

Referring to claim 8, Schlimmer et al. teach all of the limitations as applied to claim 1 above. Specifically, Schlimmer et al. teach providing handwritten data to a recognition engine (Schlimmer et al.: Section 2 on page 330 and 331 and further shown in Figure 1). However, Schlimmer et al. fail to explicitly teach providing the handwritten data to a recognition engine in response to a gesture being detected. Frink et al. teach an interface for inputting and recognizing handwritten data (Frink et al.: column 2, lines 37-65) similar to that of Schlimmer et al. In addition, Frink et al. further teach providing handwritten data to a recognition engine in response to a gesture being detected (Frink et al.: column 10, lines 29-33). It would have been obvious to one of ordinary skill in the art, having the teachings of Schlimmer et al. and Frink et al. before him at the time the invention was made, to modify the handwriting input interface of Schlimmer et al. to include evaluation of the input for recognition of gestures, as taught by Frink et al. One would have been motivated to make such a combination in order to allow users to easily edit the documents, reducing the confusion of mixing up editing commands and data input by the user.

Referring to claim 16, Schlimmer et al. teach all of the limitations as applied to claims 1 and 14 above. Specifically, Schlimmer et al. teach erasing the visible input window (visible input fields such as the "First" field and "Company" fields can be erased by selected the "x" button at the bottom right corner of the input box) (Figures 1 and 3). However, Schlimmer et al. fail to explicitly point out the input window being erased in response to a time being achieved.

Frink et al. teach an interface for inputting and recognizing handwritten data (Frink et al.: column 2, lines 37-65) similar to that of Schlimmer et al. In addition, Frink et al. further teach erasing the input window in response to a time being achieved (sending the handwritten data to the recognition engine, and therefore erasing the input, when the user stops writing for a period of time) (Frink et al.: column 2, lines 44-63 and Figures 2A, 2B and 2C). It would have been obvious to one of ordinary skill in the art, having the teachings of Schlimmer et al. and Frink et al. before him at the time the invention was made, to modify the handwriting input interface and recognition engine of Schlimmer et al. to include the erasing of the input in response to a time being achieved. One would have been motivated to make such a combination in order to allow users to perform functions such as note taking faster and more efficiently; recognizing characters after a certain time has elapsed, representing the user has completed taking notes, is faster and more efficient than translating the written data character by character while the user is taking notes.

Referring to claim 30, Schlimmer et al. teach a system comprising an application program having at least one application input area into which user input data can be entered (for example, entering name and company information into the Names application), user input interface code external to the application program (user interface to convert writing to Unicode text), a typing engine that determines whether to call the user interface code for a selected application input area of the application program based on attribute information associated with that application input area, the user interface code providing a semi-transparent input area based on the attribute information when called (deciding if fields such as "Last", "Title", etc. is configured to receive user input, i.e. whether the user has taped on the field indicating a desire to

enter information; and if the user has tapped on a field, the field expands to allow users to write information), and a handwriting recognition engine, configured to receive text information and responding by returning recognized text when provided with the information (Schlimmer et al.: Section 2 on page 330 and 331 and further shown and explained in Figure 1). However, Schlimmer et al. fail to explicitly teach a timing mechanism and a gesture engine. Frink et al. teach an interface for inputting and recognizing handwritten data (Frink et al.: column 2, lines 37-65) similar to that of Schlimmer et al. In addition, Frink et al. further teach a timing mechanism configured to cause removal of the input when no user interaction with the input area is detected for a period of time (sending the handwritten data to the recognition engine, and therefore erasing the input, when the user stops writing for a period of time) (Frink et al.: column 2, lines 44-63 and Figures 2A, 2B and 2C), and a gesture engine invoked to determine whether the user input data is text or a gesture (Frink et al.: column 8, lines 29-49 and column 10, lines 29-33). It would have been obvious to one of ordinary skill in the art, having the teachings of Schlimmer et al. and Frink et al. before him at the time the invention was made, to modify the input interface and recognition system of Schlimmer et al. to include the timing and gesture mechanisms taught by Frink et al. One would have been motivated to make such a combination in order to allow users to easily edit the documents, reducing the confusion of mixing up editing commands and data input by the user. Furthermore, it allows users to perform functions such as note taking faster and more efficiently; recognizing characters after a certain time has elapsed, representing the user has completed taking notes, is faster and more efficient than translating the written data character by character as the user is taking notes.

Referring to claim 31, Schlimmer et al. teach the recognized text is received by the user interface code and made available to the application program (the handwriting recognizer recognizes the input handwriting, converts it to Unicode text and displays it) (page 330 and 331 and further shown in Figure 1).

Referring to claim 32, Schlimmer et al. teach the application program displaying the recognized text in the application input area (page 330 and 331 and further shown in Figure 1).

Referring to claim 33, Schlimmer et al. teach a growth rulebase determining whether to alter an appearance of the semi-transparent input area in response to the information received therein (for example, changing the appearance of the input area by closing the input area in response to selection of the "x" button at the bottom right corner of the input box), as shown in Figures 1 and 3.

4. Claims 13 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlimmer et al. in the article entitled "Quantitative Results Comparing Three Intelligent Interfaces for Information Capture: A Case Study Adding Name Information into an Electronic Personal Organizer", published in the December 1996 issue of the *Journal of Artificial Intelligence Research 5*, as applied to claims 1, 12, 18 and 23 above, and Microsoft Excel.

Referring to claims 13 and 24, Schlimmer et al. teach all of the limitations as applied to claims 1, 12, 18 and 23 above. Specifically, they teach adjusting the appearance of the visible input window (Figures 1 and 3). However, Schlimmer et al. fail to explicitly teach increasing the size of the visible input window based on the data approaching an end thereof and to enable entry of additional data. Microsoft Excel (copyright 1999) (see screenshot 1) teaches an input

interface that adjusts the appearance of the visible input window (see screenshots 2 and 3 attached at the end of the office action) similar to that of Schlimmer et al. In addition, Microsoft Excel further teaches increasing the size of the visible input window based on the data approaching an end thereof and to enable entry of additional data (see screenshots 2 and 3). It would have been obvious to one of ordinary skill in the art, having the teachings of Schlimmer et al. and Microsoft Excel at the time the invention was made, to modify the input interface of Schlimmer et al. to include increasing the size of the input window as needed, taught by Microsoft Excel. One would have been motivated to make such a combination in order to allow users to enter as much information as needed, making it easier for them to input and view information.

5. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar systems and methods for receiving handwriting input and converting it to recognizable text displays.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (703) 305-0328. The examiner can normally be reached on Monday - Friday 8:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 23, 2004

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